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IMPORTANT NOTICE TO PRESENT MONTHLY SUBSCRIBERS.

Henceforth, the subscription price of the Monthly will be three dollars net to all non-members of the Association. The following adjustments for prospective members are proposed:

- (1) Those who have already paid their subscriptions for the entire year 1916 are asked to send *one dollar* additional, which will entitle them to membership in the Association.
- (2) Those who have not paid for 1916 are asked to send three dollars, which will entitle them to membership and include the Monthly. No further subscriptions for 1916 will be received at the old rate of two dollars.

In the case of subscriptions under (1) or (2) which expire before the end of 1916, please add twenty cents extra for each copy needed to complete the year. Hereafter all subscriptions will date from January of each year.

(3) An institution in which the Calculus is taught may become an institutional member of the Association by the payment of five dollars annually, which will entitle the library to receive two copies of the Monthly and the institution to send a voting delegate to all meetings of the Association. Institutions in which the Calculus is taught, whose libraries have already renewed their subscriptions for 1916, are asked to send three dollars additional and thus become institutional members of the Association.

Other institutions, and those not wishing to become institutional members, whose library subscriptions have already been renewed for 1916, are asked to send one dollar additional to complete the advanced price of the Monthly. No further subscriptions will be received at the old rate of two dollars, and no discount from the advanced rate of three dollars will be allowed on subscriptions made through agencies.

- (4) The obligations of the Monthly for 1916 will, of course, be fulfilled on the former basis in the case of any individual or institution whose subscription has already been paid, and who may decline to make the adjustment on the new basis.
- (5) Please note that all subscriptions to the Monthly and dues in the Association are to be paid to the Secretary-Treasurer, Professor W. D. Cairns, 55 East Lorain St., Oberlin, Ohio.

If you have not already returned the membership blank, please do so at once. Delay may make it impossible to secure the back issues of the Monthly.

CONSTITUTION AND BY-LAWS OF THE MATHEMATICAL ASSOCIATION OF AMERICA.

ARTICLE I-NAME AND PURPOSE.

- 1. This organization shall be known as The Mathematical Association of America.
- 2. Its object shall be to assist in promoting the interests of mathematics in America, especially in the collegiate field.

ARTICLE II-MEMBERSHIP.

- 1. Any person who is interested in the field of collegiate mathematics shall be eligible for election to membership in the Association.
- 2. Any institution in which the Calculus is regularly taught shall be eligible for election to institutional membership in the Association; such an institution shall have the privilege of sending a voting delegate to the meetings of the Association.

ARTICLE III—OFFICERS.

- 1. The officers of this Association shall be a President, two Vice-Presidents, a Secretary-Treasurer and twelve additional members of an Executive Council, together with a Committee of three on Publications, who shall be *ex-officio* members of the Council.
- 2. The President, Vice-Presidents and Secretary-Treasurer shall be elected annually for a term of one year, and four members of the Council shall be elected annually for a term of three years. They shall be eligible for reëlection, but not for more than two consecutive terms, except in the case of the Secretary-Treasurer, whose term may be extended indefinitely. The Committee on Publications, consisting of the Managing Editor and two other members, shall be appointed by the Council.
- 3. The Council shall transact the official business of the Association and shall report its actions at the annual meeting of the Association and in the official journal. Any proposed action of the Council which makes or alters a question of policy shall be published in the official journal before final action has been taken, so that members of the Association may make known to the Council their individual views.
 - 4. The Council shall have authority to fill vacancies ad interim.

ARTICLE IV-MEETINGS.

- 1. The annual meeting of the Association shall be held at such time and place as the Council may direct.
- 2. The Council shall have power to call other meetings of the Association whenever it may be deemed expedient.

ARTICLE V-SECTIONS.

- 1. Any group of members of this Association may petition the Council for authority to organize a Section of the Association for the purpose of holding local meetings. The Council shall have power to specify the conditions under which such authority shall be granted.
- 2. The Association shall not be obligated to pay from its treasury any of the expenses of such sections.

ARTICLE VI-OFFICIAL JOURNAL.

- 1. The Association shall publish an official journal, which shall be sent free to all members of the Association in accordance with Article VII.
- 2. The Council shall have power to conduct negotiations with respect to securing an official journal, and shall have full control of its publication and sale.

ARTICLE VII-DUES.

1. An individual member of the Association shall pay an initiation fee of two dollars at the time of his election.

The initiation fee shall be waived in case of those who join the Association before April 1, 1916, and this clause shall be dropped after its provisions have been fulfilled.

- 2. The annual dues of an individual member shall be three dollars, including a subscription to the official journal.
- 3. The annual dues of an institutional member shall be five dollars, including two subscriptions to the official journal.
- 4. All dues shall be payable on the first of January of each year. Should the annual dues of any member remain unpaid beyond a reasonable time, his name shall be dropped from the list, after due notice.
- 5. New members entering the Association after April 1, of any year, shall have their dues prorated for the balance of the year, except when they desire to receive the full current volume of the official journal.

ARTICLE VIII—AMENDMENTS.

This Constitution may be amended at any annual meeting of the Association by a two-thirds vote of those present and voting, provided that such amendment shall have been printed in the official journal at least one month before the date of such meeting.

BY-LAWS.

1. Election of Members. Election to membership shall be by vote of the Council upon written application from the individual or institution seeking admission.

Those who shall be admitted to membership before April 1, 1916, shall constitute the list or charter members.

2. Nomination and Election of Officers. Two months before the date of the annual meeting, all members shall be given an opportunity to nominate by mail a candidate for each office for the ensuing year. One month before the annual meeting, the Council shall announce two candidates for each office, one being the person who received the highest vote in the nominations and the othef being selected by the Council from among the several nominees next in order.

The election shall be by mail or in person and shall close on the day of the annual meeting. Twelve members of the Council shall be elected at the first meeting of the Association, and the secretary shall draw lots to determine which four of those elected shall serve for one, for two, and for three years respectively. (This clause shall be dropped after its provisions have been fulfilled.)

3. Committees. The Committee on Publications shall have charge of the official journal and of all other publications of the Association, under the direction of the Council.

The Council may appoint any other committees and delegate to them such power as may, in its judgment, seem desirable.

4. Price of Publications. The Council shall fix the price of the official journal, and of any other publications of the Association to non-members, but in no case shall the journal be sold for less than the annual dues of individual members, as specified in Article VII of the Constitution.

This shall not be construed to affect existing contracts with any subscribers or news agencies for the year 1916, who may decline to readjust on the new basis. (This clause shall be dropped after its provisions have been fulfilled.)

5. Amendments. These By-Laws may be amended at any annual meeting under the same conditions as specified in Article VIII of the Constitution.

IMPORTANT ANNOUNCEMENT

TO

ALL INTERESTED IN MATHEMAT-ICAL PROGRESS

THE AMERICAN MATHEMATICAL MONTHLY, since its reorganization in January, 1913, has endeavored to fulfill its mission as "A Journal for Teachers of Mathematics in the Collegiate and Advanced Secondary Fields."

A selection from the Tables of Contents thus far includes articles on— The History of Mathematics, such as the following:

- "History of the Exponential and Logarithmic Concepts," by Professor Florian Cajori of Colorado College;
- "The Foundation Period in the History of Group Theory," by JOSEPHINE BURNS, Graduate Student at the University of Illinois;
- "Errors in the Literature on Groups of Finite Order," by Professor G. A. Miller, University of Illinois;
- "Number Systems of the North American Indians," by Professor W. C. Eells, United States Naval Academy;
- "The Algebra of Abu Kamil," by Professor L. C. Karpinski, University of Michigan;
- "Centers of Similitude of Circles and Certain Theorems Attributed to Monge. Were they known to the Greeks?" by Professor R. C. Archibald, Brown University;
- "The History of Zeno's Arguments: Phases in the Development of the Theory of Limits," by Professor Florian Cajori, Colorado College.

Pedagogical Considerations, such as the following:

- The "Foreword" concerning Collegiate Mathematics, by Professor E. R. Hedrick, University of Missouri;
- "Some Things we wish to know," by Professor E. R. Hedrick:
- "Mathematical Literature for High Schools," by Professor G. A. MILLER;
- "Mathematical Troubles of the Freshman," by Professor G. A. MILLER;
- "Minimum Courses in Engineering Mathematics," by Professor Saul Epsteen, University of Colorado:

- "Incentives to Mathematical Activity," by Professor H. E. Slaught, University of Chicago;
- "Synthetic Projective Geometry as an Undergraduate Study," by Professor W. H. Bussey, University of Minnesota;
- "Retrospect and Prospect," by Professor H. E. Slaught;
- "Note on a Memory Device for Hyperbolic Functions," by F. S. Elder, Central High School, Kansas City, Mo.;
- "A Plea for less Formal Work in Mathematics," by F. M. MORGAN, Dartmouth College;
- "A Simple Algebraic Paradox," by Professor J. L. Coolidge, Harvard University;
- "Note on Simple Algebraic Equations," by Professor H. L. Slobin, University of Minnesota;
- "On Courses in Synthetic Projective Geometry," by Professors Lao G. Simons, Normal College of the City of New York, C. E. Stromquist, University of Wyoming, T. G. Rodgers, Normal School of New Mexico, R. D. Carmichael, and D. N. Lehmer;
- "On the Cultural Value of Mathematics," by Professors W. T. Stratton, Kansas State Agricultural College, and D. N. Lehmer;
- "On Courses in the History of Mathematics," by Professors W. T. Stratton and G. A. MILLER;
- "Remarks on Klein's Famous Problems of Elementary Geometry," by Professor R. C. Archibald, Brown University;
- "On the Trisection of an Angle and the Construction of Regular Polygons of 7 and 9 Sides," by Professor L. E. Dickson, University of Chicago;
- "An Equation Balance for Class-Room Use," by Professor E. W. Ponzer, Stanford University;
- "A Cardioidograph," by C. M. HEBBERT, University of Illinois;
- "Coördinated Courses in High School Mathematics," by Edith Long, Lincoln, Neb., and Roy Cumins, Columbia University;
- "Conference Periods for Students," by Professor C. R. McInnes, Princeton University, and Professor C. S. Atchison, Washington and Jefferson College;
- "Determinant Formula for Coplanarity of Four Points," by Professor A. M. Kenyon, Purdue University;
- "What can the Colleges do toward Improving the Teaching of Mathematics in the Secondary Schools?" by Professor C. N. Moore, University of Cincinnati.

General Mathematical Information, such as the following:

- "The Third Cleveland Meeting of the American Association for the Advancement of Science," by Professor G. A. Miller:
- "Western Meetings of Mathematicians," by Professor H. E. Slaught;
- "Summer Meeting of the American Mathematical Society," by Professor H. E. Slaught;
- "Notes and News" of events pertaining to mathematics, under the direction of a committee of which Professor Florian Cajori is chairman;
- "The Napier Tercentenary Celebration," by Professor Florian Cajori, Colorado College;
- "The Paris Report on Calculus in the Secondary Schools," EDITORIAL;
- "California Teachers of Mathematics." EDITORIAL:
- "Book Reviews" and announcements of new books in Mathematics, under the direction of a committee of which Professor W. H. Bussey, University of Minnesota, is chairman.
- Fifty-four books have thus far been reviewed, each by a selected expert in his field.

Topics Involving a Minimum of Technical Treatment, such as the following:

- "Maximum Parcels under the New Parcel Post Law," by Professor W. H. Bussey;
- "Precise Measurements with a Steel Tape," by Professor G. R. Dean, Missouri School of Mines;
- "A Direct Definition of Logarithmic Derivative," by Professor E. R. Hedrick;
- "A Simple Formula for the Angle Between Two Planes," by Professor E V. Huntington, Harvard University;
- "On the Solutions of Linear Equations having Small Determinants," by Professor F. R. Moulton, University of Chicago;
- "The Accuracy of Interpolation in a Five-Place Table of Logarithms of Sines," by Pro-FESSORS A. M. KENYON and G. JAMES, Purdue University;
- "A Theorem about Isogonal Conjugates," by David F. Barrow, Harvard University;
- "The Significance of the Weierstrass Theorem," by Professor E. R. Hedrick;
- "On the Impossibility of Certain Diophantine Equations and Systems of Equations," by Professor R. D. Carmichael, Indiana University;
- "A Computation Formula in Probability," by E. C. Molina, New York City;
- "Two Geometrical Applications of the Method of Least Squares," by Professor J. L. Coolidge, Harvard University;
- "A Puzzle Generalized," by Professor R. P. Baker, University of Iowa;
- "On Certain Diophantine Equations having Multiple Parameter Solutions," Professor R D. Carmichael;
- "A Geometrical Discussion of the Regular Inscribed Hexagon," by J. Q. McNatt, Florence Colo., and S. A. Joffe, New York City;
- "A Theorem in Number Theory connected with the Binomial Formula," by Professor D. N. Lehmer;
- "An Application of Partial Derivatives to the Ellipse," by Professor M. O. Tripp, Muncie, Ind.;
- "A Curious Convergent Series," by Professor A. J. Kempner, University of Illinois;
- "Optical Interpretations in Higher Geodesy," by Professor W. H. Roever, Washington University:
- "A Problem in Number Theory," by Professor G. A. Osborne, Massachusetts Institute of Technology;
- "Perfect Magic Squares for 1914," by V. M. Spunar, Chicago, Ill., and Professor B. L. Remick, Manhattan, Kan.;
- "The Construction of Conics under given Conditions," by Dr. B. M. Woods, University of California;
- "A Simple Method of Constructing the Normals to a Parabola," by Professor S. G. Barton, University of Pennsylvania;
- "Some Properties of the Normals to a Parabola," by Professor S. G. Barton;
- "Apparent Size of a Cube," by Professor A. M. Harding, University of Arkansas;
- "Residues of Certain Sums of Powers of Integers," by Professor T. M. Putnam, University of California;
- "Groups of Figures in Elementary Geometry," by Professor G. A. Miller, University of Illinois;

- "On the Use of Partial Derivatives in Plotting Equations from their Curves," by Professor A. M. Kenton, Purdue University;
- "A Method of Solving Numerical Equations," by S. A. COREY, Hiteman, Iowa;
- "Sur un Paradoxe Algébrique Apparent," par G. Loria, Université de Gêne;
- "The Theorem of Rotation in Elementary Mechanics," by Professor E. V. Huntington, Harvard University;
- "Groups of Subtraction and Division with Respect to a Modulus," by Professor G. A. MILLER, University of Illinois;
- "Questions and Discussions," under the direction of Professor U. G. MITCHELL, University of Kansas;
- "Problems Proposed and Solved," under the direction of Professors B. F. Finkel, Drury College, and Professor R. P. Baker, University of Iowa.

Topics Involving Somewhat More Technical Treatment, designed to stimulate mathematical activity on the part of ambitious students and teachers. Such articles have occupied only about one-sixth of the entire space; for example, such as the following:

- "The Remainder Term in a Certain Development of F(a+x)," by Professor R. D. CARMICHAEL;
- "A Geometric Interpretation of the Function F in Hyperbolic Orbits," by Professor W. O. Beal, Illinois College;
- "Certain Theorems in the Theory of Quadratic Residues," by Professor D. N. Lehmer, University of California;
- "Some Inverse Problems in the Calculus of Variations," by Dr. E. J. MILES, Yale University;
- "Amicable Number Triples," by Professor L. E. Dickson, University of Chicago;
- "The Probability Integral," by Professor E. L. Dodo, University of Texas;
- "A Note on the Solution of Linear Differential Equations," by Dr. C. R. MacInnes, Princeton University;
- 'A Graphical Solution of the Differential Equation of the First Order," by Professor T. R. Running, University of Michigan;
- "The Curve of Light on a Corrugated Dome," by Professor W. H. Roever, Washington University;
- "The Cube Root of a Binomial Surd," by Principal Arthur C. Johnson, Hopedale, Mass.
- "The Tactical Problem of Steiner," by Professor W. H. Bussey;
- "On Some Geometric Properties of Circular Transformations," by Professor Arnold Emch, University of Illinois;
- "A Note on Plane Kinematics," by Professors Alexander Ziwet and Peter Field; University of Michigan;
- "A Theorem in the Modern Plane Geometry of the Abridged Notation," by Professor R. E. Bruce, Boston University;
- "On a purely Projective Basis for the Theory of Involution," by Professor D. N. Lehmer;
- "A Formula for the Sum of a Certain Type of Infinite Power Series," by Elbert H. Clarke, Purdue University;
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